A.2 Acceptable Test Equipment

A.2.1 Digital Multimeter (DMM)

Specification:

3 1/2 digit readout

Acceptable Options:

- Fluke 87 or better model, 0.001 % basic DC accuracy
- Any commercially available digital multimeter that meets the above specifications

A.2.2 Electrical Safety Analyzer

Specifications:

Earth Resistance

Range - 0 to 19.99 Ohms

Resolution - 0.01 Ohms

Accuracy - ±5%, ±1 digit

Leakage Current

Range 0 - 19.99 µA

Resolution - 1µA

Accuracy - 2.5 to 1k Hz: ±1%, ± 1 digit

1k Hz to 100 k Hz: ± 1 digit

100 k Hz to 1M Hz: ± 1 digit

Insulation Resistance

Range - greater than 2 Meg Ohm

Acceptable Options:

- BIO TEK 601 Pro Safety Analyzer
- Any commercially available safety analyzer that meets the above specifications

Acceptable Test Equipment (Continued)

A.2.3 Joey Dosimeter (Light intensity meter) (calibrated) TS-03600-002

Dimensions:

61/3" × 1 1/2" × 3 3/4"

(16.08 × 3.81 × 9.53 cm)

Weight:

18 oz.

Uses 9v battery, 20 Sq. Cm

Sensor head:

Calculates the average irradiance across the entire therapeutic spectral region of 425 - 475 nanometers

A.2.4 Even Glo Fiberoptic Panel

Specifications:

Large Panel Model EG2000 - 14.0" (W) × 4.0" (D) (35.56 × 10.16 cm)

Neonatal Panel Model EG 2000N - 5.0" (W) × 4.0" (D) (12.70 × 10.16 cm)

Mechanical Requirements:

Large Panel Model EG2000

Level 1:	10	microW/cm²/nm
Level 2:	15	microW/cm²/nm

Neonatal Panel Model EG2000N

Level 1	25	microW/cm²/nm
Level 2:	35	microW/cm²/nm

(This page left intentionally blank.)

Appendix B: Schematics

B.1 Schematic Statement B-3

B.2 Controller PCB B-4

(This page left intentionally blank.)

Appendix B: Schematics

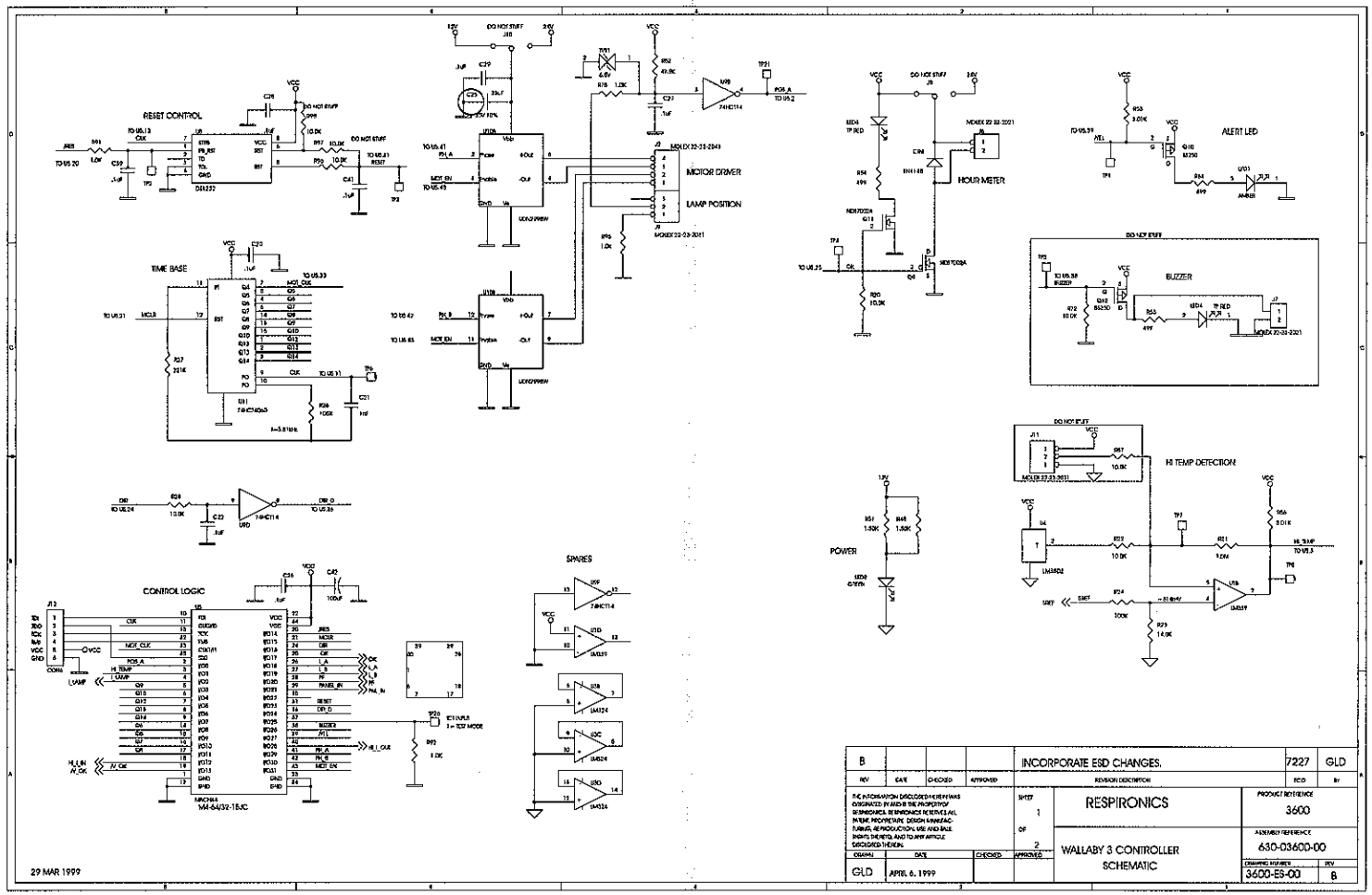
B.1 Schematic Statement

Schematics are supplied with this manual in direct support of the sale and purchase of this product.

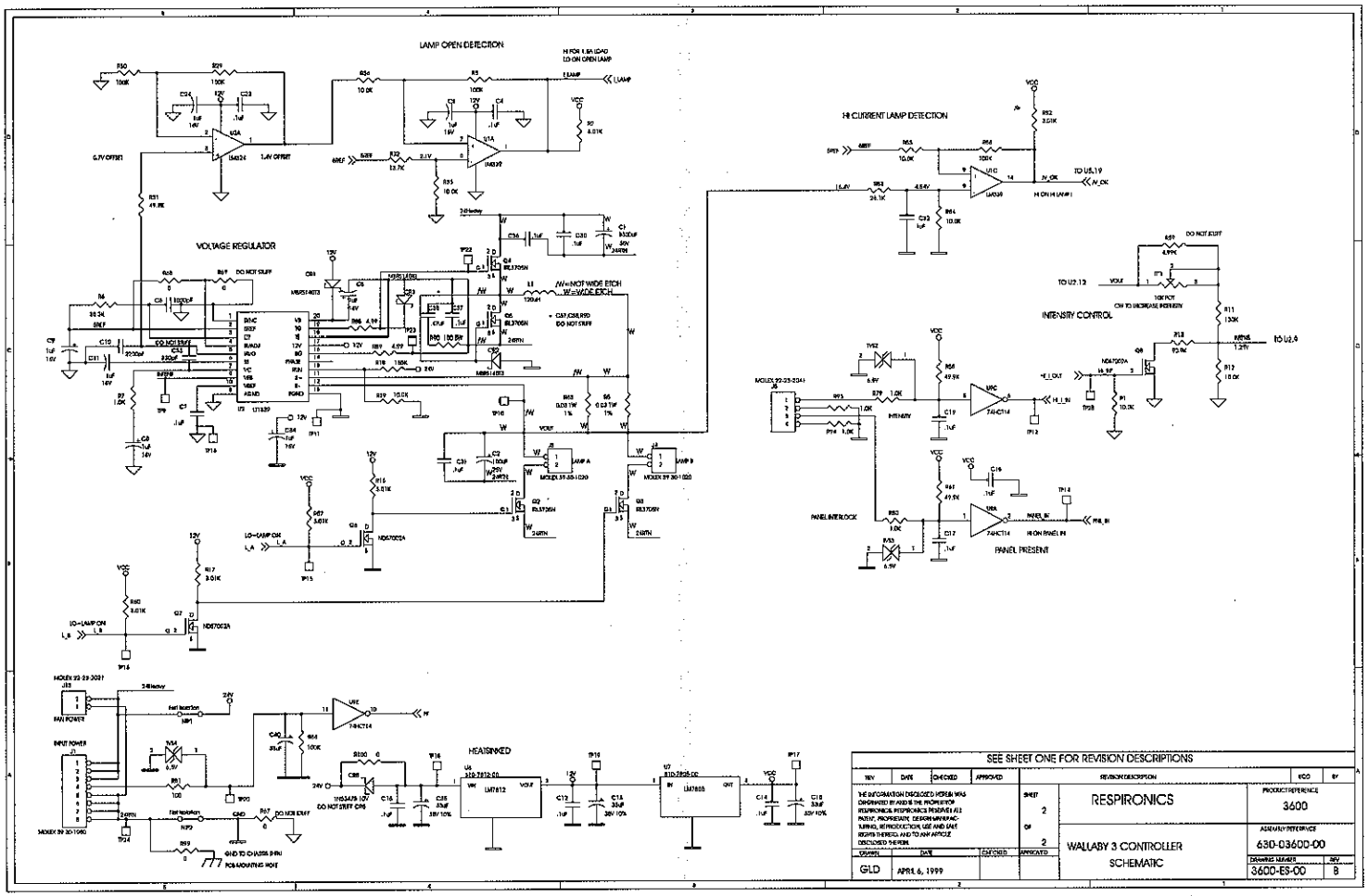
The schematics are proprietary and confidential. Do not copy the schematics or disclose them to third parties beyond the purpose for which they are intended. Patents are pending.

The schematics are intended to satisfy administrative requirements only. They are not intended to be used for component level testing and repair. Any changes of components could affect the reliability of the device, prohibit lot tracking of electronic components, and void warranties. Repairs and testing are supported only at the complete board level.

The schematics are of the revision level in effect at the time that this manual was last revised. New revisions may or may not be distributed in the future.



Controller PCB



Controller PCB

(This page left intentionally blank.)

Index

A

AC Power Inlet
Installing 7-42
Removing 7-41
AC Power Wiring Harness
Installing 7-71
Removing 7-71
Actuator Bracket
Installing 7-84
Removing 7-83
Agency Approval Label
Installing 7-27
Removing 7-27
Alternate Accessories 4-6
Amber LED - System Alert 4-5

C

Calibrated Joey Dosimeter 4-3, 4-6, 8-6
Calibration of Controller PCB 8-4
Equipment Setup 8-4
Purpose 8-4
Test Equipment and Tools 8-4
Calibration Procedure 8-5
Cautions 2-4
Circulation Fan w/ Wiring Harness
Installing 7-49
Removing 7-48
Cleaning
Fiber Optic Panel 5-4
Illuminator Unit 5-4
Optical Filter 5-5
Controller Printed Circuit Board (PCB)
Installing 7-87
Removing 7-86
Controller PCB Calibration Data Sheet 8-13
Customer Satisfaction Center (CSC) 1-4

E

Earth Leakage Current Test 8-11
Electro-Static Discharge (ESD) 2-4
Exploded Views 7-4, 7-5, 7-6

F

Fiber Bundle Connector Subassembly
Installing 7-76
Removing 7-76
Fiber Optic Panel 5-4
Fiber Optic Panel (Standard and Neonatal) 8-6
Filter Bracket Ground Wiring Harness
Installing 7-62
Removing 7-61

Index (Continued)

Front Panel
Installing 7-78
Removing 7-78
Front Panel Assembly
Installing 7-59
Removing 7-55

G

Green LED - Power On 4-4
Ground Impedance, Earth Leakage Current, and Safety Test 8-11
Ground Impedance 8-11
Earth Leakage Current 8-11
Safety 8-11
Ground Impedance, Earth Leakage Current, and Safety Test Data Sheet 8-16
Grounding Kit 7-60

H

Handle
Installing 7-36
Removing 7-36
Handle Warning Label
Installing 7-29
Removing 7-29
Heat Sink Contact Strip
Installing 7-61
Removing 7-61
Hour Meter
Installing 7-67
Removing 7-67
Hour Meter Wiring Harness
Installing 7-65
Removing 7-64
Hyperbilirubinemia 1-3

I

Installation Flow Chart 7-19
Introduction 1-3

J

Joey Dosimeter 4-3, 8-6, A-5

L

Lamp Holders
Installing 7-90
Removing 7-89
Lamp Replacement 5-6
Light Level / Panel Input Wiring Harness
Installing 7-74
Removing 7-73
Light-Emitting Diode (LED) 1-3, 4-4
Linear Slide Bracket Assembly
Installing 7-96
Removing 7-96

Index (Continued)

Linear Slide Inner Chassis
Installing 7-99
Removing 7-98
Linear Slide Micro Switch Assembly
Installing 7-39
Removing 7-38

Linear Stepper Motor Actuator
Installing 7-81
Removing 7-80

M

Main Chassis Subassembly
Installing 7-101
Removing 7-101
Maintenance 5-3
Overview 5-3

N

Neonatal Jaundice 1-3
Notes 1-5

O

Optical Filter Assembly
Installing 7-69
Removing 7-69
Outer Cover Assembly
Installing 7-34
Removing 7-33

P

Panel Input Ground Spring Gasket
Installing 7-62
Removing 7-62
Power Supply Assembly
Installing 7-53
Removing 7-51
Preserving Lamp Life 5-9
Lamp Life Expectancy 5-9
Optical Intensity Setting 5-9
Soil on Lamp 5-9
Vibration and Mechanical Shock 5-9

Index (Continued)

R

Removal Flow Chart 7-18
Repair Kits 7-7
Repair & Replacement 7-3
Replacement Instructions ..... 7-17 - 7-102
Required Accessories 4-6
Required and Alternate Accessories 4-6
Rubber Foot
  Installing 7-21
  Removing 7-21

S

Safety 2-3
Safety Test 8-11
Schematics B-3
  Schematic Statement B-3
  Controller PCB B-4, B-5
Service Notice 1-4
Slide Rails
  Installing 7-94
  Removing 7-93
System Final Test 8-6
  Equipment Setup 8-6
  Purpose 8-6
  Test Equipment and Tools 8-6
  Test Procedure 8-7
System Final Test Data Sheet 8-14
System Overview 1-3
System Setup Procedures 4-3
  Overview 4-3
  Required and Alternate Accessories 4-6
  System Setup 4-4

T

Testing 8-3
  Calibration of the Control PCB 8-4
  Ground Impedance, Earth Leakage Current, and Safety Test 8-11
  System Final Test 8-6
  Testing Process 8-3

U

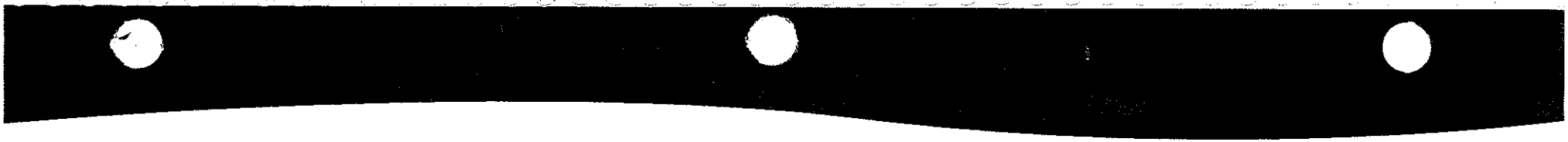
User Interface Overlay
  Installing 7-23
  Removing 7-23

Index (Continued)

W

Wallaby 3 Phototherapy System (Wallaby 3) 1-3
Wallaby Logo Overlay Label
Installing 7-25
Removing 7-25
Warnings 2-3
Safety 2-3
Operational 2-3
Service 2-3
Cleaning 2-4
Warnings and Cautions 7-16
Warnings, Cautions, & Notes 2-3
Wiring Harness
24 Volt
Installing 7-46
Removing 7-44
AC Power
Installing 7-71
Removing 7-71
Hour Meter
Installing 7-67
Removing 7-67
Lamp Holder
Installing 7-90
Removing 7-89
Light Level / Panel Input
Installing 7-74
Removing 7-73

(This page left intentionally blank.)



RESPIRONICS INC.®
1001 Murry Ridge Lane
Murrysville, Pennsylvania
15668-8550 USA

RESPIRONICS®
Deutschland
Gewerbestrasse 17
82211 Herrsching Germany

Reorder # 1003037

Reorder # 1003036
ds 02/20/03